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Osterhout

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[54] **HAND TOOL FOR USE IN MAKING TUFTED YARD GOODS**

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[51] **Int. Cl.** **D04d 7/06,** A41h 43/00

[58] **Field of Search** 28/2, 115; 289/17

[56] **References Cited**

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[57] **ABSTRACT**

A hand tool is positionally arranged with a slotted gauge for use in making tufts of material.

2 Claims, 3 Drawing Figures

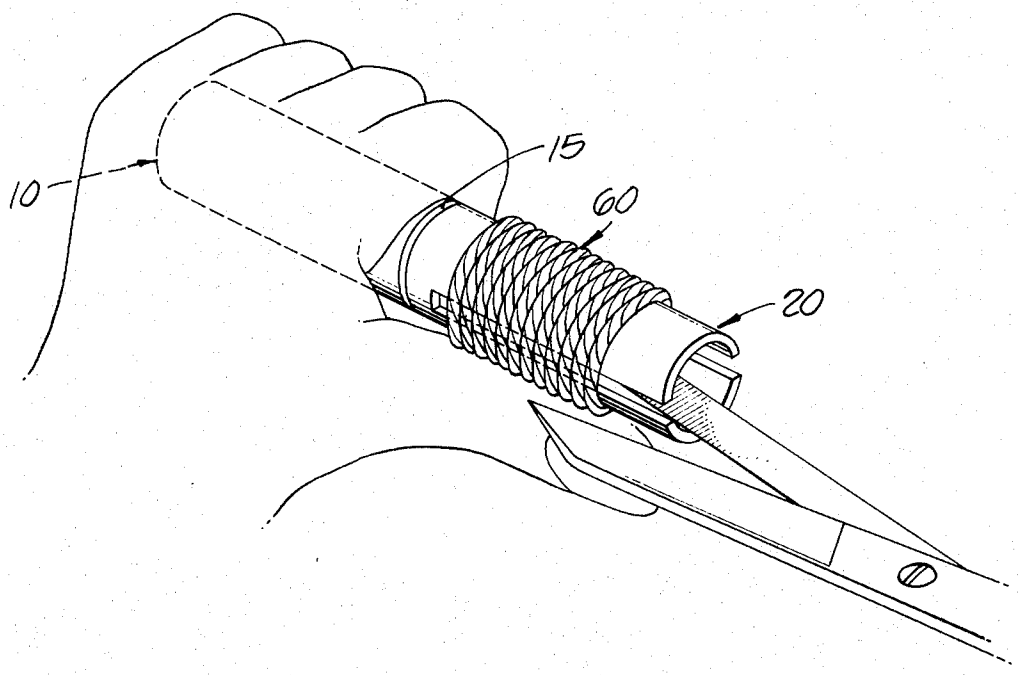


FIG. 1.

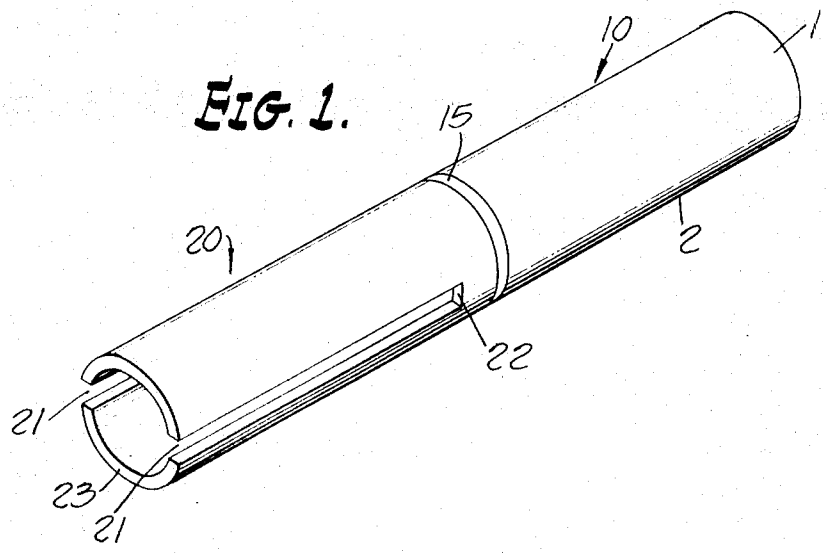


FIG. 3.

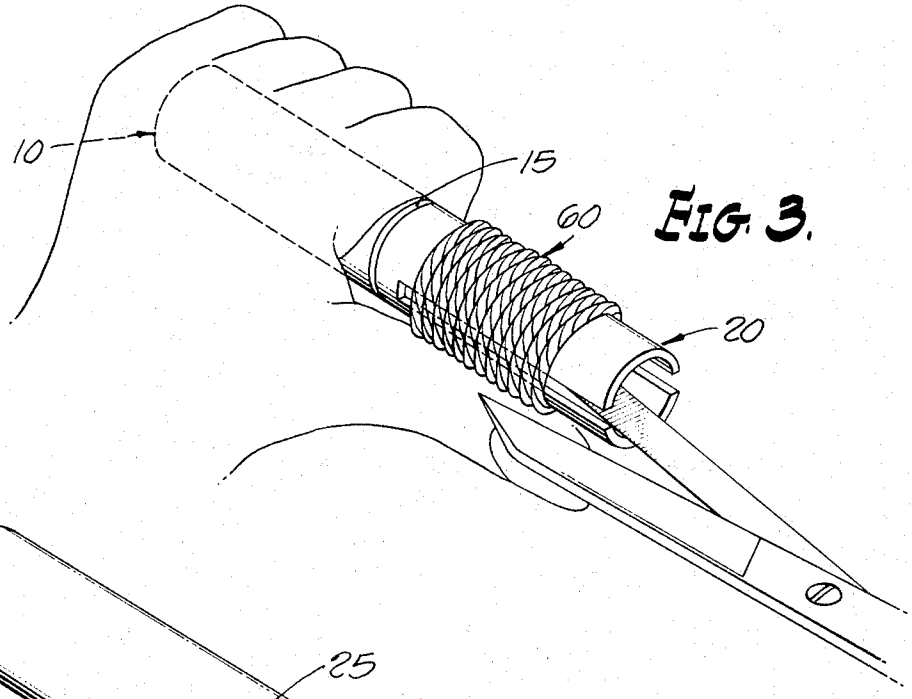
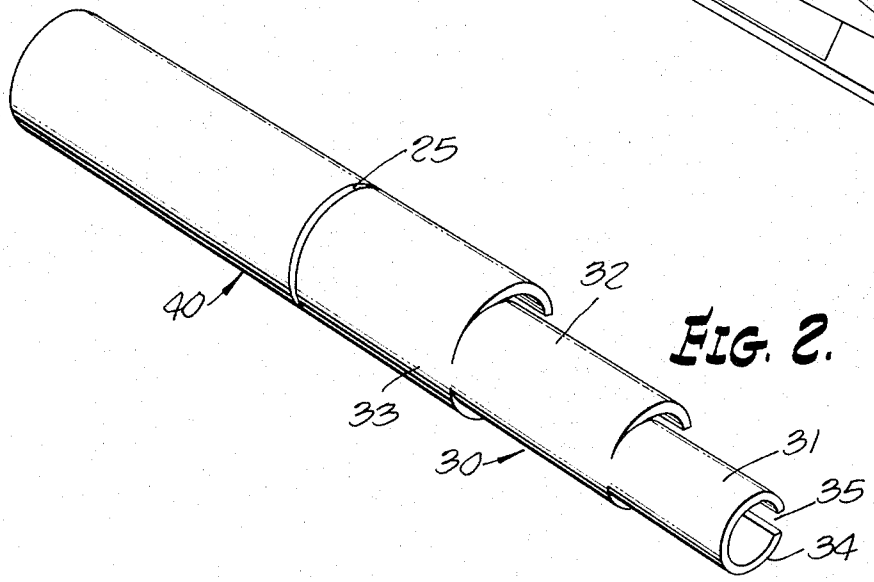


FIG. 2.



HAND TOOL FOR USE IN MAKING TUFTED YARD GOODS

BACKGROUND OF THE INVENTION

This invention relates to hand tools. In particular a hand tool for use in making tufts of material for yard goods is described. The hand tool permits maximum use of user's skills while assisting the user in producing an acceptable product.

Increasing leisure time has fostered the development of numerous recreational and hobby devices. These devices vary in complexity from simple to quite complex, however, it often appears that the more complex the device itself might seem or the method for using the device might be, the poorer the reception and use of the device by the public.

In the general field of sewing and in particular working with yarn, the expansion of leisure time devices has also been significant. Popular forms of these hobbies consist of needlepoint, embroidery, knitting, crocheting, and making of tufted garments, rugs, towels, washrags and the like. The particular invention embodied herein deals with the latter, i.e., the making of tufted yard goods.

SUMMARY OF THE INVENTION

The present invention provides a simple hand tool for use in making tufted yard goods, in particular yard goods on which there is placed tufts of yarn or other material. The device provides means for forming the tuft for ultimate disposition on a piece of previously prepared material.

The basic form of the device is quite simple—as was the specific intent to make a simple device. Many devices now in the public domain comprise elaborate schemes which remove most of the artistry from handmaking articles such as can be made utilizing the device herein. The particular device of this invention allows the user a maximum amount of hand operation requiring a degree of skill while utilizing a simple and useful tool that prevents the task from being unduly burdensome. The hand tool of the present invention does not deprive the user of the reward of individual artistry and effort.

Thus, it is an object of this invention to provide a hand tool for use in making tufted yard goods.

It is another object of this invention to provide a hand tool wherein individual skill of the user is required.

It is another object of this invention to provide a hand tool wherein the user can readily adapt personal skills to achieve an acceptable degree of capability within a short period of time, yet without the utilization of a complicated device.

These and other objects and advantages of the invention as well as the details of an illustrative embodiment will be more fully understood from the following description and drawings in which:

DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of the hand tool of the present invention.

FIG. **2** is a perspective view of a second embodiment of the hand tool of the present invention.

FIG. **3** is a perspective view of the hand tool shown in FIG. **1** wherein the manner of use of said hand tool is illustrated.

DETAILED DESCRIPTION

FIG. **1** is a perspective view of the hand tool of the present invention. The tool comprises handle **10** attached to gauge **20.** The handle **10** and gauge **20** are separated by junction **15.** Junction **15** is depicted mainly for exemplary purposes and provides no particular useful function other than for means of illustration as a separation between the handle **10** and gauge **20.** Indeed one embodiment of the hand tool might be a continuous form handle leading into the gauge without use of any distinct separation between the gauge **20** and handle **10.** On the other hand, junction **15** could be a circular raised area between the gauge **20** and handle **10** and thus aid in holding the hand tool.

The gauge **20** is generally circular and extends from the handle **10.** Slots **21** exist longitudinally in gauge **20** and have an open end **23** at the end of gauge **20** not attached to handle **10.** The gauge **20** is shown to be a hollow tube, however, the handle **10** need not (but may) be hollow.

A variation of the hand tool shown in FIG. **1** is where gauge **20** has but one slot running longitudinally in the gauge. Some benefits can be achieved however by use of the double slot gauge as shown in FIG. **1.** Representative benefits include ease of manufacture where rolled metal or tubed plastic is used (since a single cut in the gauge could produce two slots) and easier orientation of a slot to a user when the tool is in use.

The handle **10** may have a closed-end **1.** The actual details of design for the handle area are not significant to the present invention. Indeed it is within the spirit and scope of this invention that handle **10** may take any particular shape convenient for hand gripping. In this regard handle **10** may have grooved areas for placing of the fingers or may be otherwise serrated to facilitate gripping.

FIG. **2** is a perspective view of a hand tool of the present invention comprising handle **40** and gauge **30.** The handle **40** and gauge **30** are as in FIG. **1** separated by a junction **25,** however, as noted before the significance of junction **25** is not in the design of the hand tool of the present invention but is for purposes of the description.

Gauge **30** of the device of FIG. **2** comprises three attached generally circular surfaces, **31, 32,** and **33** respectively. The diameter of circular section **33** is greater than that of circular section **32** and the diameter of circular section **32** is greater than that of circular section **31.** The improvement of gauge **30** in FIG. **2** over gauge **20** of FIG. **1** is that various lengths of tufted goods may be prepared from the hand tool of FIG. **2** whereas tufts of a singular length or at best only two lengths (two slotted gauge device) may be prepared from the tool of FIG. **1.**

As in FIG. **1,** the tool of FIG. **2** is shown to be constructed of hollow material which may either be formed, extruded, injection molded or similarly manufactured. The particular thickness of the gauge and handle sections is so long as consistent with good engineering practices not important.

Gauge **30** of FIG. **2** has longitudinal slot **35** extending from the interface of gauge **30** with handle **10** to the end **34** of gauge **30.** The slot **35** exists in each of the curved surfaces **31, 32** and **33.** The function, purpose and design of the slot of the hand tool of FIG. **1** is the same as the hand tool of FIG. **2.** The hand tool of FIG.

2 could also have more than one slot, however consideration must be given the strength of the areas of the gauge **30** common to two circular sections.

As in FIG. **1**, the handle **10** of FIG. **2** may take any form convenient for gripping.

Manufacture of the hand tool of either FIG. **1** or FIG. **2** is without sharp edges. No cutting edge of any kind is provided on the tool itself, and, indeed, care in manufacturing must be exercised to insure that edges of ends of the hand tool, or of the slots in the tool or elsewhere are not so sharp as to cause harm to the operator or to cause inadvertent cutting or damage to the yarn or other material as it is wrapped on the gauge.

FIG. **3** is a pictorial representation of the hand tool of the instant invention in use. In FIG. **3** a hand tool as shown in FIG. **1** is held by handle **10,** as shown in FIG. **3** by the right hand of an operator. Wrapped around the gauge end **20** of the hand tool are circumferential rows of yarn or other similar material **60** from which a tuft is to be made. The strands of material, the scissors (whose usefulness is to be described later), and the operator are not, of course, part of the invention nor or they to be considered part of the hand tool of the present invention.

As many strands of yarn or material as are desired for the tuft to be manufactured by utilization of the tool are wrapped in circumferential rows on gauge end **20.** For a given thickness of material, the more circumferential rows, the thicker or "bigger" the manufactured tuft. However, it can be readily observed that the thicker the yarn or material the fewer the number of circumferential rows that can be conveniently wrapped on the gauge.

In actual practice one hand of the operator would be used to wrap the yarn or material around the gauge end of the tool. One end of the yarn would be secured by the thumb of the hand of the operator gripping the handle while the other hand would wrap the desired number of circumferential rows on the gauge. The operator then would release the yarn or other material and pick up any convenient sharp device and cut the wrapped material. As shown in FIG. **3,** a pair of scissors is one means for cutting the yarn or material. In order to prevent the cut lengths of yarn or material from dropping from the gauge, the thumb of the operator secures the strands in place by sliding over the strands and pressing against the gauge. Thus as each strand is cut it does not fall but is held tight against the gauge end of the hand tool of the present invention.

The cutting of the yarn or other material usually occurs at one place only. Even though the device of the present invention as shown in FIGS. **1** and **3** contains two slots, the two slots are simply for convenience, for instance, to both right and left handed operators and to avoid uncomfortable positions of the wrist when cutting the yarn or material. Also, a double slotted hand tool as described herein is very useful where the tool is to be used by people that alternately use their left and right hand for wrapping the yarn or other material. The opposite side for cutting might be more convenient to a particular individual than another, so too provision is made for this variation in individual desires.

Once the circumferential rows of yarn or material that have been wrapped around the gauge are severed the operator can then grip the strands of yarn or material with a free hand (usually the same hand that performed the cutting task) and proceed to tie the tuft into place on the base material of the particular item that is being made at the time.

Having described the operation briefly with reference to FIG. **3,** an advantage of the device of FIG. **2** is now readily apparent. With reference to the device of FIG. **2,** it can now readily be seen that tufts of yarn or material of various lengths can be easily manufactured from the same hand tool as shown in FIG. **2.** The length of the strands that comprise the tuft is, of course, determined by the diameter of the particular substantially cylindrical shaped section of the hand tool of FIG. **2.** The operator when using the hand tool as described in FIG. **2** simply moves the gripping hand farther up on the handle to allow sufficient position for the thumb to be placed over the severed yarn or material lengths prior to cutting.

A variation on the hand tool of FIG. **2** is where said gauge is truncated cone having at least one slot therein. Of course such a device has continuous, smooth sides as contrasted with the segmented sides of the gauge **30** of FIG. **2.** A truncated cone gauge provides means for making tufts of yarn or other material comprised of strands of different lengths.

In addition to each particular tuft having strands of different lengths (although each strand will vary only slightly in length, depending upon the slope of the cone) different tufts whose strands vary significantly in length from another tuft can be made from the same hand tool having a truncated cone gauge section.

The use of the hand tool described herein is most convenient for making shag rugs and other tufted material such as animals, slippers, towels, decorative pieces, curtains, or any other device using tufted yarn or material. Preparation of the base material to which the tuft will be attached is, of course, undertaken prior to use of the hand tool. Positions for placing the tufts on the base material can be priorly marked and prepared to receive the tuft. Such preparation usually involves stitching lengths of yarn or other material at the desired location of the tufts. The yarn or other material secured to the base material becomes the center tie down for the tuft. The lengths of yarn or other material will be used to tie the tuft at approximately the mid-point and thus securing the tuft to the base material.

After the base material is prepared the operator will utilize the hand tool described herein for making the tufts. As has been described aforesaid the tool will be gripped by the handle and yarn or other material wrapped circumferentially around the gauge of the tool as many times as is desired for the particular tuft. Through actual experiment it has been determined that approximately 12 times around the tool produces a nice full tuft. It is, however, important not to overlap the yarn or material on the gauge since an awkward tie of the tuft may result.

After wrapping the yarn or material around the gauge end of the tool the yarn or material is cut as aforesaid by a sharp instrument so that plurality of equal lengths of yarn are held against the gauge by the operator. The operator then grips the severed lengths of yarn and places them over the previously prepared tie of yarn or material on the base material. The ends of the previously prepared tie are then gripped and tied in a double knot or such other securing knot to firmly fix the tuft against the base material. The tuft and the tie yarn or material can be trimmed as necessary or desired. However, if the tie material has been properly prepared and

the choice of yarn or other material correct, no trimming, or very little, will be required.

An endless number of variations can be achieved in tufting devices by use of the hand tool described herein. Multi-colored yarns are readily adaptable to use by this hand tool. An operator works from three or four different coloured yarn or other material sources and circumferentially wraps first one and then the other on the gauge end of the hand tool. It is entirely at the discretion of the operator as to how many rows of each particular color to wrap on the gauge.

Actual hand tools as described herein have been prepared from metal, however, a great deal of modern day technology is useful in manufacturing this device. Other material from which the tool may be made, though not by way of limitation, are wood, plastic, metal, synthetics, rubber, and, depending on the type of material used to manufacture the hand tool, the finishes of the hand tool can range from smooth to a pebbled or scarred finish and may be painted, plated, left natural, or prepared in a combination of finishes.

Again, with a view to the practically endless variety of ways in which the hand tools of the present invention may be manufactured, tools having gauge ends of various sizes can be prepared to accommodate different sizes of yarn or other material and thus for making tufts different lengths. A convenient size for material used most often in making shag rugs is for a hand tool of the present invention whose overall length is approximately 6 inches and whose slot (Item **21**, FIG. **1**) has a length of three inches. For these dimensions, the hand tool had a one inch diameter with approximately a 0.12 inch wall thickness and a 0.38 inch width slot. It is to be noted that the dimensions are provided for exemplary purposes only and not by way of limitation.

I claim:

1. A hand tool comprising:

a handle,

a gauge attached to said handle said gauge being a truncated hollow cone, the major diameter of which is positionally adjacent said handle, said truncated hollow cone defining at least one slot parallel to the major axis of said gauge.

2. The hand tool of claim **1** wherein said gauge comprises a series of adjacent hollow tubular sections, each of said tubular sections having a different diameter and defining a slot therein.

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